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Subject: Preparation for 11/17 EPA/LWG FS Mtg
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The purpose of this e-mail is 2-fold. 1st, to share my thoughts about what I expect & I'd like to see in the 11/17 EPA/LWG FS mtg. 2nd, to start a conversation/consideration in our team about the meeting. I hope this e-mail moves the effort forward & doesn't delay or sidetrack us..., so take it for what it's worth.

Here are the steps I expect & I'd like to see the LWG present on 11/17.

Step 1- General Response Actions (GRAs) & RAOs- Verify the GRAs as dredging, capping, MNR, & possibly in-situ treatment. The GRAs have all ready been defined, so it's really just a way to start out the mtg with this verification. Same is true for RAOs. Let's start the meeting off with something simple, something we agree with, & something positive.

Step 2- Identify subareas in each AOPC or SMA- I see 3 types of subareas in each AOPC/SMA: **1)** "hot spots" (or principle threat or hilltopping) areas where active remediation (i.e., dredging, capping, or perhaps in-situ treatment) is anticipated (i.e., areas that are **not** a good candidates for MNR) ..., **2)** areas with sediment contamination less than "hot spot" concentrations but greater than acceptable risk levels (ARL) where dredging, capping, or possibly in-situ treatment is anticipated, but MNR/enhanced MNR is emphasized (but not pre-determined)...., & **3)** areas with ARLs where remediation is not anticipated. Ideally we'd have both rough area & volumes estimates for these subareas.

Step 3- Identify & screen technologies/process options on an AOPC/SMA basis- I understand **technologies** to be general categories of remedial actions like capping, dredging, or MNR. I further understand **process options** to be specific subset processes for each technology type. For instance, for the technology of capping..., process options would include: thin-layer capping, engineered capping, reactive capping, etc. I think the LWG should use the following list of technologies/process options in this screening step: 1) ICONs, 2) MNR, 3) enhanced MNR, 4) thin-layer capping, 5) engineered capping, 6) reactive capping, 7) dredging with landfill disposal, 8) dredging with CDF/CAD disposal, 9) dredging with ex-situ treatment, 10) dredging with upland management of spoils, & 11) in-situ treatment. I imagine there may be more technologies/process options, or at least variations of the listed technologies/process options such as clam-shell vs environmental-bucket dredging, etc. The screening should eliminate certain technologies/process options that just won't work at that particular AOPC/SMA..., e.g., capping alone won't work because contamination is in navigation channel..., contamination isn't amenable to in-situ treatment..., etc. This screening is really eliminating those technologies/process options that can't be implemented on a technical basis. One important question is whether this technology/process option screening should be done on an AOPC/SMA basis or on a "subarea" basis (see Step 2). I think it would be best to do it on a "subarea" basis..., but of course that would make the process more complex.

Step 4- Assemble technologies/process options into remedial action alternative (RAAs)- Assemble the technologies/process options into RAAs that represent a range of treatment,

containment & MNR combinations. The RAAs must be protective of human health & the environment. Again, the question is whether RAAs should be developed on an AOPC/SMA basis or on a "subarea" basis. Again, I think it would be best to assemble technologies/process options on a "subarea" basis. Develop 5 RAAs for "**subarea(s)**" **1** (i.e., hot spots) & 5 RAAs for "**subarea(s)**" **2** (i.e., non-hot spot, but >ARLs). The 5 RAAs for the "**subarea(s)**" **1** should emphasize active remediation (i.e., dredging & capping). The 5 RAAs for the "**subareas**" **2** should include dredging & capping, but emphasize MNR/enhanced MNR.

Step 5- Screen RAAs- Use effectiveness, implementability & cost reasonableness as screening criteria. Alternatives with the most favorable composite evaluation of all 3 factors should be retained for detailed screening.

Step 6- Detailed Evaluation of RAAs- As the 1988 EPA RI/FS Guidance says..., the detailed evaluation is a comparative analysis among the RAAs to assess the relative performance of each RAA with respect to each of the 9 evaluation criteria.

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If we get as far as finishing Step 4 (or maybe even Step 5) for the 3 AOPCs in the 11/17 mtg..., I'll be happy.

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